

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

Staff Report for Regular Meeting of December 9-11, 2020

Prepared on November 15, 2020

ITEM NUMBER: 14

SUBJECT: Wildfire Prevention and Recovery Activities - Update

STAFF CONTACTS: Michael Sandecki, (805) 549-3372,
Michael.Sandecki@waterboards.ca.gov

ACTION: Information/Discussion

SUMMARY

Item 14 provides an update on the Central Coast Water Board's wildfire prevention and recovery activities and describes the dynamic environmental and administrative context in which these activities occur. Central Coast Water Board staff has increased its coordination of wildfire prevention and recovery activities to provide water quality oversight for fuel (vegetation) reduction projects and post-fire recovery efforts occurring in the region. Significant activities include oversight of fuel reduction projects to help prevent wildfire, emergency wildfire response coordination, and post-wildfire assessment and recovery. Staff activity within these areas is subject to unpredictable wildfire occurrence, and recent fires in the region have shifted the emphasis from oversight of fuel reduction activity to emergency wildfire response coordination and post-wildfire recovery.

BACKGROUND

In the Fall of 2020, the CZU Lightning Complex burned 86,509 acres and 1,490 structures in Santa Cruz and San Mateo Counties and is ranked as the 12th most destructive fire in California to date. The River and Carmel Fires burned 46,993 acres and destroyed 103 structures in Monterey County, and the Dolan Fire, also in Monterey County, burned 124,924 acres in the Los Padres National Forest impacting a 20-mile stretch of Highway one in Big Sur.

Recent executive orders and legislative actions have resulted in major fire prevention efforts. Among these, Senate Bill (SB) 901 allowed a host of timber harvest exemptions to encourage forestland fuel reduction projects. These exemptions also give utility companies flexibility to remove vegetation along transmission and distribution lines and authorize vegetation treatment projects in the highway right of way to reduce wildfire ignition sources.

In December 2019, the California Board of Forestry and Fire Protection certified a new program to help minimize wildland fire risk across California while ensuring the highest level of environmental oversight. The California Vegetation Treatment Program (CalVTP) will create efficiencies within the regulatory process to scale up fuel treatment and forest restoration projects toward meeting the State's goal of treating 500,000 acres of non-federal lands annually.

In 2019, the California Legislature also approved funding for additional staff resources in Regional Water Quality Control Boards 1, 3, 5 and 6 to help ensure that wildfire prevention activities conducted in conformance with SB 901 are protective of beneficial uses. The primary water quality concerns around fuel reduction projects are the use of herbicide, increased sedimentation, and elevated nutrients in runoff. In December 2019, the Central Coast Water Board hired engineering geologist Mike Sandecki to address wildfire prevention and recovery activities in the central coast region.

DISCUSSION

The Central Coast Water Board's wildfire prevention and recovery activities are focused around three primary programmatic functions: wildfire fuel reduction, emergency wildfire response, and post-wildfire assessment and recovery. To maintain an efficient and adaptable response to wildfire, Mr. Sandecki coordinates wildfire prevention and recovery activities with staff in several programs (e.g., Land Disposal, National Pollutant Discharge Elimination System (NPDES), Waste Discharge Requirements (WDR), 401 Certification, and Stormwater). The table below summarizes these programmatic activities which are described in more detail in the following sections. Staff also coordinate with the State Water Resources Control Board (State Water Board), California Office of Emergency Services (CalOES), CalFire, CalRecycle, and several other state and local agencies to effectively conduct wildfire prevention and recovery activities in the region.

Program	Wildfire Prevention and Recovery Related Activity
Wildfire Prevention and Response Lead Staff	Ensure effective internal and inter-agency coordination with State and County Office of Emergency Services (OES), CalFire, CalRecycle, Department of Toxic Substances Control (DTSC), County Public Works and Environmental Health Department, and several other state and local agencies.
401 Certification	Implement expedited 401 Certification application process to authorize critical work in stream channels and water course stabilization.
Grants	Coordinate with applicants and program staff to evaluate and support potential post-fire grant project proposals to

	implement water quality protection projects in areas impacted by wildfires.
Land Disposal	Participate in coordination related to Phase 1 (toxic) and Phase 2 (debris) cleanup. Provide guidance on the handling and disposal of fire-related debris and waste material; Coordinate with landfills to ensure that proper permits are in place to accept fire-related waste.
Stormwater	Provide guidance on water quality best management practices related to construction activities and erosion control.
Waste Discharge Requirements	Engage wastewater treatment plants and facilitate permitting and compliance assistance; Coordinate with local agencies to address septic system repairs.

Oversight of Fuel Reduction Activity

Emergency Orders (e.g., Executive Orders B 52-18 and N 06-19) and legislative actions, including SB 901, have established a new paradigm that will greatly increase fuel reduction projects statewide. This increased activity is intended to lessen the severity and number of wildfires by reducing fuels in the wildland urban interface, establishing defensible space for community assets, and improving forest health. In addition, vegetation treatment will target protection of ingress and egress routes in fire-prone areas and mitigate potential road and utility corridor ignition sources. CalFire is the lead agency for the majority of vegetation treatment work, administering grant programs that distribute funds to state and local government partners and implementing the California Forest Practices Act.

Since December 2019, Central Coast Water Board staff has developed capacity in the following areas associated with fuel reduction activity in the region:

- Evaluate and provide technical reviews of proposals to fund fuel reduction projects,
- Identify and track fuel reduction projects for water quality issues,
- Participate in development of State Water Board general orders to regulate vegetation treatment,
- Regulate fuel reduction activity in utility corridors through NPDES and CWA Section 401 orders, and
- Participate in interagency meetings that develop and implement fuel reduction policies and endorse funding for projects.

Central Coast Water Board staff tracks fuel reduction projects using databases administered by CalFire, including the CalTrees timber harvest database, the CalVTP database, and grant-funded project prioritization listings. Staff also tracks non-point source program funding candidates in coordination with our grants program. Staff also maintains interagency connections to expand awareness of fuel reduction activity and its water quality implications, including the Governor's Forest Management Task Force Regional Prioritization Groups, which involve CalFire, Fire Safe Councils, local governments, Resource Conservation Districts, and researchers.

Through these tracking and coordination activities, staff has observed fuel reduction and vegetative treatment activity increasing in the central coast region (e.g., currently 71 CalFire grant funded projects are proposed). To address potential water quality impacts from fuel reduction projects, staff regulates vegetation management in utility corridors through the NPDES Construction Stormwater General Permit and through 401 Certifications where applicable. Staff also reviews CEQA documents to evaluate potential risks to water quality for fuel reduction projects for which we have no existing orders or permits to regulate.

The number and size of fuel reduction projects is expected to increase statewide to a minimum of 500,000 non-federal acres per year by 2024. The State Water Board is currently developing general orders to address fuel reduction work occurring in areas under State responsibility for fire protection. Staff participates in the State Water Board's forestry working group to develop a general order for projects administered via the CalVTP, tentatively scheduled for State Board adoption in spring 2021. Staff is also engaged with Water Board counterparts to amend Clean Water Act Section 401 authorization for fuel reduction in waters of the United States and evaluating options for protection of waters of the State. These orders will provide the Central Coast Water Board defined regulatory mechanisms to address vegetation management activities potentially affecting water quality but may also increase staff workload.

Emergency Wildfire Response

Emergency response work is primarily the responsibility of firefighters, police, and specialized emergency personnel – first responders – to ensure public safety. Even before a wildfire is fully contained, CalFire and County Offices of Emergency Services (County OES) begin an inventory of burned residences, evaluate damaged infrastructure such as roads, water supply, and sewer systems, and initiate steps to bring the facilities back into operation. Public utility companies such as PG&E set up emergency operations centers to restore power.

Central Coast Water Board staff's role during wildfire emergencies includes monitoring the progress of firefighters to contain the fire and maintaining a readiness to provide timely responses to inquiries about regulatory requirements affecting first responders' operations and participating on the Watershed Emergency Response Team (WERT). During the recent fires in Santa Cruz and Monterey Counties, staff from various programs coordinated with State Water Board's Emergency Management Program and

Division of Drinking Water, County OES, and local wastewater and drinking water systems to address emergency conditions as they surfaced.

As emergency conditions transition into the wildfire recovery phase, Central Coast Water Board staff expedite permitting that is needed to urgently address impacts of the fire. For example, staff from the Land Disposal Program ensure landfills are prepared to accept debris generated during cleanup, staff from the NPDES and WDR programs assist wastewater facilities, and staff from the Stormwater and 401 Certification Programs assist individuals needing permit assistance for construction activities and work in stream channels (e.g., culvert repair and replacement).

Phase 1 Cleanup - The USEPA, in coordination with DTSC, systematically removes and disposes of toxic household waste such as propane tanks, batteries, and stored chemicals in burnt residences. The agencies are nearing completion of this process, referred to as Phase 1 (toxic) cleanup. The urgency of completing the removal of toxic substances before the wet season begins places Phase I into the emergency response phase of wildfire occurrence.

Phase 2 Cleanup - CalRecycle implements Phase 2 (debris) cleanup, removing burned trees, ash and char, and the remains of burnt dwellings including their foundations. Phase 2 operations proceed over a longer time frame and transition into the assessment and recovery phase discussed below.

Wildfires in the central coast region pose an immediate threat to public health and safety in the burn zone, but they also typically produce a second emergency during subsequent rain events due to the potential for flooding and debris flows. After the December 2017 Thomas Fire in Ventura and Santa Barbara Counties, debris flows had tragic consequences for people residing on alluvial fans at the mountain front. The 2020 wildfires present similar risks and a second wave of emergency conditions may be triggered this winter. State and County OES agencies have developed plans to evacuate areas at risk as rain-exceedance thresholds are approached and Central Coast Water Board staff is prepared to support emergency response activities, as appropriate.

Watershed Assessment and Recovery

In the aftermath of a wildfire, a multitude of federal, state, and local government agencies perform myriad functions to ensure recovery of communities and the environment. This recovery phase proceeds over months and even years and its success depends on adequate coordination among the agencies involved and complete assessment of conditions on the ground. Central Coast Water Board staff has identified its primary role is to provide timely permitting and compliance assistance to regulated parties affected by the fire. In addition, staff also facilitates coordination between affected stakeholders and other state and local agencies to address watershed recovery in a timely manner. The following provides examples of how staff performs this role through three key activities:

Timely Permitting and Compliance Assistance for Authorization of Recovery Activities

WDR Program staff have engaged with wastewater facilities impacted by the CZU Lightning Complex Fire to facilitate permit compliance as facilities confront interruptions in their operations and in some cases the need to rebuild. 401 Certification staff have developed an expedited 401 certification application process to simplify and accelerate authorization of critical work in stream channels.

The CZU Lightning Complex Fire destroyed entire neighborhoods in the Santa Cruz Mountains. In the coming months and years, the recovery of the areas affected by the 2020 wildfires will involve reconstruction of homes, infrastructure, and environmental restoration. Multiple Central Coast Water Board programs will be impacted by increasing requests for permitting and authorization of activities with a nexus to water quality (e.g., wastewater system reconstruction, construction stormwater erosion control, watercourse stabilization, road improvements).

To further assist the communities affected by the wildfires, the Central Coast Water Board posted resources online to clarify that post-fire recovery projects may require Central Coast Water Board permits and to provide specific permitting instructions for activities associated with construction, work in and around waters of the State, repairs to septic systems and wastewater treatment plants, and the handling and disposal of emergency-related waste material.

Coordination with Local Agencies to Support Wildfire Recovery

Staff participates in task forces established to address primary risks to human and environmental health. Staff from the Stormwater and Land Disposal Programs participate on the Cal OES WERT/Debris Flow Task Force, which brings together emergency service personnel and local, state, and federal agencies. The task force tracks progress on Phase 1 and 2 cleanup, addresses values at risk from storm events following a wildfire, and supports efforts to bring public infrastructure back on-line. Additionally, Land Disposal Program staff work with landfill facilities to ensure the appropriate permitting requirements are completed in advance of the collection and disposal of fire debris.

Central Coast Water Board staff participates in weekly meetings with staff from the State Water Board Emergency Management Program, Division of Drinking Water, and Regional Boards joined by local resource management and environmental health agencies to coordinate efforts to restore drinking water in heavily-impacted burned areas in Santa Cruz County. Staff is also engaged in a State Water Board effort to assemble a statewide GIS platform for WERT information, damage assessments, regulated facilities, and burn perimeters for individual fire incidents to inform Regional Boards and help them respond to wildfire incidents.

On October 19, 2020, staff participated in a field trip to view the CZU Lightning Complex Fire burn areas with local agency partners, PG&E representatives, Resource Conservation District staff, and a registered professional forester from an industrial

timber company. Staff benefited from the opportunity to see first-hand the conditions that pose a risk to water quality in the wake of wildfire and to increase partnerships with stakeholders directly involved in recovery. Staff found that in cases where Phase 2 debris removal would not take place prior to winter rains, Phase 2 completion should be prioritized around protecting drinking water aquifers and surface waters. Staff also discussed with representatives from the Santa Cruz Resource Conservation District and County Departments of Public Works and Environmental Health methods to protect-in-place ash and debris that could potentially degrade water quality. Field trip participants observed tree trimming and removal operations and discussed options to safeguard and prepare for potential debris flows and flooding.

Participation in Watershed Assessments Conducted in Burn Zones

With oversight from Cal OES, CalFire assembles WERTs and US Forest Service assembles Burned Area Emergency Response (BAER) teams to assess values at risk from debris flow and increased flooding in fire-impacted areas. Stormwater Program staff participated in the WERT effort for the Thomas Fire in 2018. This year, CalFire and California Geological Survey staff prepared WERT reports for the CZU Lightning Complex, River, and Carmel incidents in the Santa Cruz and Monterey Counties. The USFS prepared a BAER report for the Dolan Fire. Water Board staff reviews these reports to inform its priorities in the post-fire assessment and recovery effort.

Human Right to Water

California Water Code section 106.3, subdivision (a) states that it is “the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation purposes.” On January 26, 2017, the Central Coast Water Board adopted Resolution No. R3-2017-0004, which affirms the realization of the human right to water and the protection of human health as the Central Coast Water Board's top priorities. Staff coordinates closely with the State Water Board's Division of Drinking Water to ensure that wildfire prevention and recovery activities are prioritized around protecting sources of drinking water, providing assistance to affected drinking water systems, and ensuring that communities have safe drinking water.

Disadvantaged Communities

The Central Coast Water Board implements regulatory activities and water quality projects in a manner that ensures the fair treatment of people of all ethnicities, cultures, backgrounds and income levels, including disadvantaged communities (DACs). Additionally, the Central Coast Water Board is committed to providing all stakeholders the opportunity to participate in the public process and provide meaningful input to decisions that affect their communities. Currently, staff is in the process of determining the impacts of the recent wildfires on DACs. To the extent that wildfire prevention and recovery activities affect DACs, Central Coast Water Board staff will help facilitate outreach and education to inform affected parties and connect them with available resources.

Climate Change

Climate change has created a new wildfire reality for California. The State's fire season is now almost year-round. More than 25 million acres of California wildlands are classified as under very high or extreme fire threat. Approximately 25 percent of the State's population - 11 million people - lives in that high-risk area (Governor's Wildfire Strike Force, 2019). Drought conditions, low snowpack accumulation, and extreme temperature highs, prevalent in the last decade, are expected to worsen as climate change continues to alter landscapes and local climates (NOAA 2018; IPCC 2018).

Central Coast Water Board workload is expected to increase due to the anticipated number and size of fuel reduction projects to reduce wildfire risk and multiple regulatory programs will also be impacted by wildfire recovery activities and increasing requests for permitting and authorization of activities with a nexus to water quality.

CONCLUSION

Climate change is expected to increase wildfire occurrence and severity over time and the central coast region will face the threat and the effects of climate change for the foreseeable and distant future. Central Coast Water Board staff will continue to leverage multiple programs and coordinate with state and local agencies to implement an efficient and adaptive approach to addressing the water quality effects of wildfire prevention and recovery in the region.